

# WWMCCS OBJECTIVES AND MANAGEMENT PLAN (U)

JCS REVIEW COMPLETED



## VOLUME I ANNEX K WWMCCS EVALUATION PROGRAM (U)

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THE JOINT CHIEFS OF STAFF  
WASHINGTON, D.C. 20301

JANUARY 1976

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WWMCCS EVALUATION PROGRAM (U)

1. The Secretary of Defense has directed through DOD Directive 5100.30 that the WWMCCS:
  - a. Have a system configuration and operation that is as efficient as possible in terms of effectiveness and utilization of resources.
  - b. Be exercised frequently under the most realistic conditions possible in order to insure readiness and identify deficiencies. This will be accomplished through exercises that test and evaluate the WWMCCS functions, equipment, and procedures.
2. The WWMCCS Evaluation Program has been developed to provide a longer range program for evaluation activity than has previously been available. The program, including a schedule of evaluation events, will be updated on a yearly basis and published not later than January each year. This program comprises Annex K to Volume I, the WWMCCS Objectives and Management Plan. It covers a 5-year period in order to interface with the Planning, Programming, and Budgeting System cycle and the development of the JCS Directed and Coordinated Exercise Schedule.
3. Enclosed for your use is the FY 1977-1981 Program. Comments or questions should be addressed to the OJCS, J-3, Attention: Operations and Evaluation Division.
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For the Joint Chiefs of Staff:



G. E. COOKE  
Brigadier General, USAF  
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## I INTRODUCTION (U)

1. (U) The purpose of the WWMCCS, as stated in DOD Directive 5100.30, 2 December 1971, "World-Wide Military Command and Control System (WWMCCS)," is to provide the means for operational direction and technical administrative support involved in the function of command and control of US military forces. DOD Directive 5100.30 specifies a requirement for frequent WWMCCS exercises under the most realistic conditions possible, in order to insure readiness and identify deficiencies.
2. (U) As a means of assessing the adequacy of the WWMCCS to fulfill its purpose and perform its two basic functions, an evaluation program was implemented in 1973. This program, which has been supported by the JCS-sponsored command post exercise (CPX) program, other selected exercises, technical and operational analyses, and research and development efforts, has evolved to a state that requires that it be documented for information and management purposes.
3. (U) Annex K to Volume I of the WWMCCS Objectives and Management Plan describes the WWMCCS Evaluation Program and sets forth the responsibilities, objectives, tasks, and methodology associated therewith. It is intended as the basic source document for general information pertaining to the requirements and scope of WWMCCS evaluation efforts.
4. (U) By means of the methodology, resources, schedules, and other planning mechanisms described herein, the evaluation program is coordinated, performed, and reported; support functions such as record keeping, development of analysis techniques, and computer applications are accomplished; and progress and summary reports are prepared.

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## II RESPONSIBILITIES AND OBJECTIVES (U)

### 1. (U) Responsibilities

#### a. The Joint Chiefs of Staff are responsible for:

- (1) Advising on the effectiveness of the WWMCCS.
- (2) Providing centralized direction and management for the WWMCCS Evaluation Program.
- (3) Maintaining program documentation and distributing reports to the Secretary of Defense and other users.
- (4) Providing centralized direction and management for the completion of reports required by the schedule of evaluation events.
- (5) Conducting semiannual briefings for the WWMCCS Council on evaluation program results.
- (6) Publishing on a semiannual basis a report based on results of the WWMCCS Evaluation Program.

#### b. The commanders of the unified and specified commands, Chiefs of Military Services, and the directors of DOD agencies are responsible for:

- (1) Conducting and participating in exercises and tests.
- (2) Recommending to the Joint Chiefs of Staff specific objectives for inclusion in this annex.
- (3) Providing to the Joint Chiefs of Staff inputs for the WWMCCS Evaluation Program schedule of events on a yearly basis. These inputs will be recommendations for WWMCCS exercise events and their associated specific evaluation objectives.
- (4) Conducting analyses and submitting analysis reports on events listed in the program as requested by the Joint Chiefs of Staff.

#### c. The National Security Agency/Central Security Service is responsible for:

- (1) Participating in the communications security and signals intelligence aspects of planning, development, implementation, test, and evaluation for the WWMCCS Evaluation Program.

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(2) Providing the Secretary of Defense and the Joint Chiefs of Staff with analyses of the communications security threat to specific events in the program, e.g., exercises.

2. (U) Objectives

a. The primary objectives of the WWMCCS Evaluation Program are as follows:

(1) Evaluate the operational performance and effectiveness of the WWMCCS by means of selected exercises, operational evaluations, technical evaluations, simulation/war game evaluations, and real-world crisis situation evaluations.

(2) Identify and diagnose system performance problems (equipment or procedural), recommend solutions, and monitor implementation actions for WWMCCS improvement.

(3) Identify and establish standards of performance required of the WWMCCS and WWMCCS subsystems.

b. The following are supporting program objectives:

(1) Incorporate evaluation procedures in crisis action operations and in existing exercises or conduct new exercises to determine how well the system meets the established standards.

(2) Develop automated aids to reduce the manual labor involved in the planning and conduct of exercises and to expedite the evaluation process.

(3) Develop analytical methods, including simulations, to permit a broad range of situations and scenarios to be evaluated while minimizing the number of separate exercises.

(4) Establish and maintain a data base of system characteristics and historical performance records.

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### III PROGRAM TASKS (U)

(U) Program tasks designed to support the WWMCCS Evaluation Program are discussed below.

1. (U) Evaluate the Operational Performance and Effectiveness of the WWMCCS. The WWMCCS Evaluation Program incorporates specified elements of operational evaluations, technical evaluations, simulation/war game evaluations, and real-world crisis situation evaluations. These evaluation sources include the following:

a. Operational Evaluations. Exercises and tests conducted by the Military Services, the Joint Chiefs of Staff, the unified and specified commands, and other DOD components that contribute information on the readiness and effectiveness of the WWMCCS.

b. Technical and Analytical Evaluations. Technical tests, studies, and investigations by DOD components to determine the technical effectiveness of the WWMCCS. The emphasis in these technical evaluations is on the determination of the interoperability requirements of WWMCCS subsystems and the identification of technical changes required to improve overall system reliability, security, and efficiency under all potential conflict situations.

c. Simulation/War Game Evaluations. Games and simulations conducted by the Military Services, the Joint Chiefs of Staff, and DOD components to test the responsiveness of the WWMCCS to specific requirements. Special emphasis will be given to evaluation of standard WWMCCS application packages and reporting procedures to determine relevance and define deficiencies relative to NCA and JCS requirements.

d. Real-World Crisis Situations. These provide a real-world source of information on which to evaluate the WWMCCS performance. Joint Staff evaluations of system performance in crisis situations measure the performance of the WWMCCS in stress situations against established standards.

2. (U) Identify and Diagnose System Performance Problems (Equipment and Procedural), Recommend Solutions, and Monitor Implementation Actions for WWMCCS Improvement. A system for identifying, assigning, and monitoring remedial action projects is an integral part of the WWMCCS Evaluation Program. Corrective actions of a minor nature are coordinated and implemented by the Joint Staff. Other matters are referred to the appropriate Service or Defense agency for further action.

3. (U) Identify and Establish Standards of Performance Required of the WWMCCS or WWMCCS Components.

- a. The WWMCCS Objectives Plan for FY 1975-1994 delineates six command and control functional tasks. The basic qualities that the system must possess to support effectively the command and control functional tasks are defined as: credibility, flexibility, responsiveness, survivability, and security.
- b. With the exception of survivability, data requirements have been identified by the OJCS to measure the system qualities described above. These are detailed in the analysis plan for each event and reported in the Evaluation Results Report. Some standards have been developed for these measures. However, the significance of each of the qualities and the standards must be assessed individually for situations ranging from a minor regional crisis to general nuclear war. Standards will be incorporated into Volume IV of this document.
- c. Included within the scope of this task is the maintenance of the performance standards so that they remain in consonance with the medium and long-range objectives for WWMCCS improvements.

4. (U) Incorporate Evaluation Procedures in Crisis Action Operations and in Existing Exercises or Conduct New Exercises to Determine How Well the System Meets the Established Standards.

a. The major exercises which constitute the JCS-sponsored CPX program are summarized in Table 1. The conditions simulated in these exercises can range from a crisis to general nuclear war. A primary objective of these exercises is the evaluation of system readiness and the identification of deficiencies. Changes have been incorporated in these exercises which have improved their overall utility for performance evaluation.

(1) When feasible, all exercises in the JCS-sponsored CPX program incorporate procedures for evaluation of selected portions of the WWMCCS.

(2) General war exercises such as PRIME TARGET 77 are conducted every 2 years. The new selected procedural exercises such as POLE VAULT 76, which have selected system and procedures evaluation as their primary objective, are conducted in the alternate years.

(3) Regional exercises such as ELEGANT EAGLE 76 are conducted to exercise and evaluate plans, procedures, and systems which support operations in crises and conflict situations at less than a general war level. Exercises in this series are usually designed to evaluate contingency or operation plans developed for each unified or specified command region of operations. These exercises may be run on a no-notice basis.

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TABLE 1

SUMMARY OF CURRENT MAJOR EXERCISE PROGRAMS (U)

EXERCISE	FREQUENCY DURATION		LEVEL OF CONFLICT	PARTICIPANTS	PRIMARY EXERCISE OBJECTIVE (s)	EVALUATOR
	SCHEDULE	NO-NOTICE				
GENERAL WAR (PRIME TARGET)	BIENNIAL 8-11 DAYS		GENERAL WAR	NMCS, CINCs, SERVICES, OTHER FED AGENCIES	EXERCISE AND EVALUATE PLANS AND PROCEDURES	JCS
SELECTED PROCEDURAL (POLE VAULT)	BIENNIAL 4-7 DAYS		GENERAL WAR	NMCS, CINCs, SERVICES, OTHER FED AGENCIES	EXERCISE & EVALUATE A SPECIFIC SYSTEM OR SET OF PROCEDURES IN DEPTH	JCS
REGIONAL (ELEGANT EAGLE)	1/ YR 5 DAYS		LESS THAN GENERAL WAR	NMCS, CINCs, SERVICES, OTHER FED AGENCIES	EXERCISE AND EVALUATE PLANS & PROCEDURES FOR REGIONAL CRISIS	JCS
PROCEDURAL TIMING (POLO HAT)	4/ YR 2 DAYS	60/ YR 1/2 HR	GENERAL WAR	NMCS/SIOP FORCES	EXERCISE EAP TIME DISSEMINATION OF SIOP EXECUTION MSG	DCA JCS CINCs
COMMAND READINESS (PORT ARMS)		7/ YR 6-12 HRS	CRISIS	NMCS & SELECTED CINCs	EXERCISE AND EVALUATE PROCEDURES FOR REGIONAL CONTINGENCIES	JCS CINCs

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b. Exercises of lesser magnitude which have training as their principal objective are shown in Table 2. System operations and procedures are evaluated in these exercises but in a less formal manner.

c. In addition to the command and control system exercises, frequent communications tests are run throughout the WWMCCS. Table 3 contains a listing of the more significant tests.

d. When feasible, information derived from other selected JCS directed and coordinated exercises and tests is used for measuring and evaluating the performance of the WWMCCS. Since there are limitations to the exercise program, other methods are used to supplement the exercises. These are discussed in the following paragraph.

e. War Game Simulations. The JCS Studies, Analysis, and Gaming Agency, successor to the Joint War Games Agency, has the responsibility for conducting two types of simulations applicable to WWMCCS evaluation. Computer-based simulations are used to game general war plans such as the SIOP, with evaluation against an opposing Red Plan or RISOP. Politico-military simulations, conducted on a manual basis with senior participants from throughout the executive community, address national security policy issues and provide an open forum for the free exchange of ideas among key decisionmakers. These simulations provide insight into the needs and reactions of decisionmakers and their surrogates and are also used in planning exercise scenarios.

f. Crisis Observations. Procedures for collecting data on information requirements during actual crisis operations as well as during exercises have been established. In reviewing critical situations that have occurred over the past 12 years, 60 potential crisis situations were identified, and 15 actual crises were identified. Information requirements for real-world situations will continue to be observed and analyzed.

5. (U) Develop Automated Aids to Reduce the Manual Labor Involved in the Planning and Conduct of Exercises and to Expedite the Evaluation Process.

a. Basic to the conduct of this program is the employment of automation in exercise design, conduct, monitoring, data taking, and data processing to facilitate evaluation of the WWMCCS. The state of the art for using automation in the evaluation of the WWMCCS is still in its infancy. Recognizing this fact and the need to continue WWMCCS evaluation through exercises, the JCS-managed evaluation program is proceeding with exercise design using traditional techniques with some automated aids and contains provisions for exploring the use of additional automation in exercises. As successes are achieved in the latter program, they can be incorporated in WWMCCS exercises.



TABLE 2  
OTHER EXERCISES (U)

EXERCISE	FREQUENCY DURATION		LEVEL OF CONFLICT	PARTICIPANTS	PRIMARY EXERCISE OBJECTIVE(s)	EVALUATOR
	SCHEDULE	NO-NOTICE				
ELK TREE	200/YR 1-4 Hrs		GENERAL WAR (SIOP EXEC)	NMCC (EA) ANMCC NEACP CINCS	TRAINING	J-32
WHITE ROCKET/ WHITE PINNACLE		300/Mo 20 MINUTES 100/Mo 20 MINUTES	CRISIS SITUATION	NMCC, CINCS, FORCES	TRAINING	J-32
EGG ROLL (NUCFLASH)		4/YR (MIN) 30 MIN-2 HRS	CRISIS SITUATION	NMCC	TRAINING	J-32
POST CARD		AS DIRECTED 3 HRS	CONTINGENCY THROUGH GENERAL WAR	NMCS	TRAINING	J-32
VIGILANT OVERVIEW	4/YR 2 HRS		WARNING CPX TW/AA	NORAD, NMCC, SAC	TRAINING	NORAD

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TABLE 3  
COMMUNICATIONS TESTS (U)

SYSTEM	PARTICIPANTS	FREQUENCY
JCSAN	NMCC, ANMCC	NMCC/DAILY, ANMCC/ 1 WEEKLY
AUTOVON CONFERENCE	EA ELEMENT ALL CENTERS	15 WEEKLY
GOVT AGENCY CONFERENCE	17 GOVERNMENTAL AGENCIES	3 WEEKLY
CDS VOICE AUTHENTICATION	JCSAN WITH CANADIAN FORCES	4 WEEKLY
HF RADIO; ALFA, BRAVO NET	NEACP, CINCs, MOBILE ALTERNATES	1 DAILY
DCS RADIO PATCH TEST	ANMCC & COMMANDS OUTSIDE CONUS	2 MONTHLY
NORAD BMEWS NET TEST	NMCC, NORAD, BMEWS SITES	1 WEEKLY
SLBM VOICE REPORTING	NMCC	14 WEEKLY
NATO ALERT TEST	REGIONAL DESK OFFICERS SACLANT	8-12 WEEKLY
EMATS TEST	NMCC, ANMCC	4 DAILY

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b. It is reasonably clear that automated aids for general nuclear war and perhaps limited nuclear war exercises are applicable and likely to be useful for evaluating WWMCCS subsystems employed in these areas. Applicability of automated aids in crisis management exercises is less obvious at this time and is being further explored.

6. (U) Develop Analytical Methods, Including Simulations, to Permit a Broad Range of Situations and Scenarios to be Evaluated While Minimizing the Number of Separate Exercises.

a. Analytical methods including system simulations are useful tools in the overall evaluation of the effectiveness of the WWMCCS. Some system characteristics such as survivability can be evaluated through analysis and the use of simulations or models.

b. Use of online computer model to represent elements which do not participate in an exercise could add more realism for the participants. Simulations could also be used to refine proposed exercise scenarios and to provide exercise observers or data collectors (staff personnel assigned to collect exercise data) with expected measures of performance.

c. Another use of simulations would be to evaluate proposed changes to equipment or to existing plans and procedures prior to their being incorporated into the WWMCCS.

7. (U) Establish and Maintain a Library of System Characteristics and Historical Performance Records. The Library includes:

- a. Historical performance data.
- b. Standards and measures.
- c. System descriptions and design performance specifications.
- d. Known deficiencies.
- e. Ongoing programs to correct known deficiencies.
- f. R&D programs to correct deficiencies and improve capabilities.

This library is maintained by the Joint Staff.

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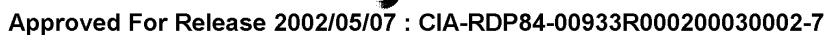
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#### IV EVALUATION METHODOLOGY (U)

##### 1. (U) Overall Evaluation Methodology

- a. A program of this complexity requires a sound rationale for organizing its various tasks, obtaining its inputs, and providing outputs. Various activities are used as the basis for WWMCCS evaluation. These include: major exercises, smaller exercises, communications tests, war games, observations of real-world operations, and analyses.
- b. A comprehensive WWMCCS evaluation methodology must provide for:
  - (1) Centralized planning of events for evaluating WWMCCS performance over a spectrum of projected world environments.
  - (2) Organization and methodology for obtaining substantive inputs for the program.
  - (3) Preparation of evaluation reports.
  - (4) Distribution and presentation of results to users.
  - (5) Utilization of system characteristics and historical performance records.
- c. This methodology depends upon JCS-sponsored evaluation events, technical and operational tests, field exercises, and analyses and evaluations conducted by the unified and specified commands, the Services, and Defense agencies to measure and monitor the performance of systems which are either a part of or support the WWMCCS.
- d. Evaluation of the performance of the WWMCCS in support of the NCA is the primary objective of this program. The sources of evaluation data shown in Figure 1 are used in combination with the defined command and control functional tasks and standards of performance to produce overall WWMCCS evaluation. These results are distributed to all users, and multiple passes through the cycle shown in Figure 1 are needed before an efficient and effective operation of the methodology is achieved. The WWMCCS Evaluation Program includes events which evaluate individual parts of the WWMCCS as well as the total system.
- e. DCA prepares an NMCS Exercise and Evaluation Support Plan to support the Joint Chiefs of Staff in the evaluation of this principal component of the WWMCCS. DNA conducts an Integrated Nuclear Communications Assessment Program to provide analytical data to complement test and exercise data for evaluation.

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## 2. (U) Evaluation Process

a. The steps in the evaluation process used for the comprehensive JCS-sponsored CPX program are shown in Figure 2. The other techniques and opportunities are generally more limited in scope and application, although more numerous than the JCS-sponsored CPXs.

b. Evaluation Objectives Include:

(1) Evaluate the Ability of the WWMCCS to Support:

- . Crisis Recognition
- . DEFCON Changes
- . Situation Monitoring
- . Tactical Warning/Attack Assessment
- . Execution Planning, Execution, and Execution Monitoring
- . Residual Capability Assessment
- . Reconstitution
- . Redirection
- . Termination.

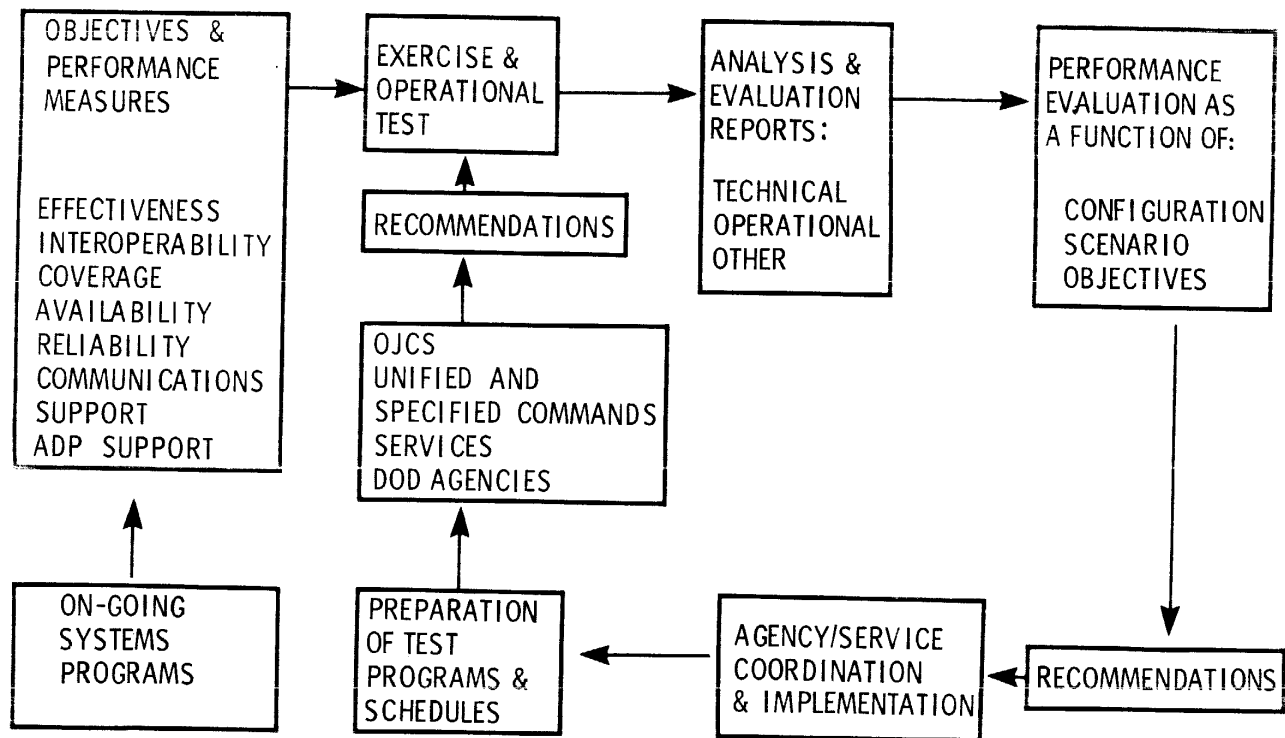
(2) Evaluate Management Use of and Utility of:

- . Standard Applications Software
- . Data Bases
- . Reporting Systems
- . Deployable Contingency Communications Packages.

(3) Evaluate the JCS Organization and Procedures for Emergency Operations, Including:

- . NMCC Operations Teams (Normal and Increased Alert)
- . Augmented Operations Teams
- . Crisis Action Teams
- . Emergency Operating Procedures Organization.

FIGURE 2  
EVALUATION METHODOLOGY





(4) Evaluate Information Flow as Related to:

- . Requirements
- . Displays
- . Briefings
- . Exchanges between the Joint Chiefs of Staff, DOD, and other Government agencies such as the Department of State and the White House.

(5) Develop practical no-notice exercises to test the utility of the system and to identify manning and hardware shortfalls in crises.

(6) Evaluate Availability and Adequacy of Intelligence Provided to the NCA/Joint Chiefs of Staff and Evaluate:

- . Availability and adequacy of DIA interface with the Joint Chiefs of Staff
- . Utility and feasibility of "all source" intelligence in the NMCC.

c. The Criteria Used to Improve the Validity of Performance Evaluations Include:

- . Short notice concerning exercise details
- . Some "free play" by exercise participants
- . Realism to the extent possible
- . Systematic data collection and analysis
- . Formal evaluation of exercise results.

In addition, preexercise planning is extensive and includes devising innovative techniques and procedures for crisis management. Active play includes unusual or unexpected situations presented to exercise players.

d. The steps involved in the evaluation process which are used as the basis for planning as illustrated in Figure 2 are necessarily cyclical in nature. The actions and outputs from each step are self-explanatory.

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e. In addition to the Joint Staff, the evaluation of the WWMCCS necessarily involves other DOD and Federal agencies and organizations and installations located around the globe. The participants in the planning, controlling, and playing of exercises are shown in Figure 3. The concepts and objectives for each exercise are approved by the Joint Chiefs of Staff. The participating organizations take part in all three categories of activities shown. For example, plans are distributed to all of the agencies shown in Table 4. The specific systems and procedures to be evaluated and the associated data collection requirements are specified in the prescribing directive for each individual exercise. Every organization listed has an opportunity to comment on and to influence the exercise design, provided that this is done early in the planning process.

### 3. (U) Evaluation Reports

a. Reports are prepared on JCS coordinated and directed exercises and tests selected for evaluation. These reports are distributed to the Secretary of Defense and all users approximately 120 days following the end of each event.

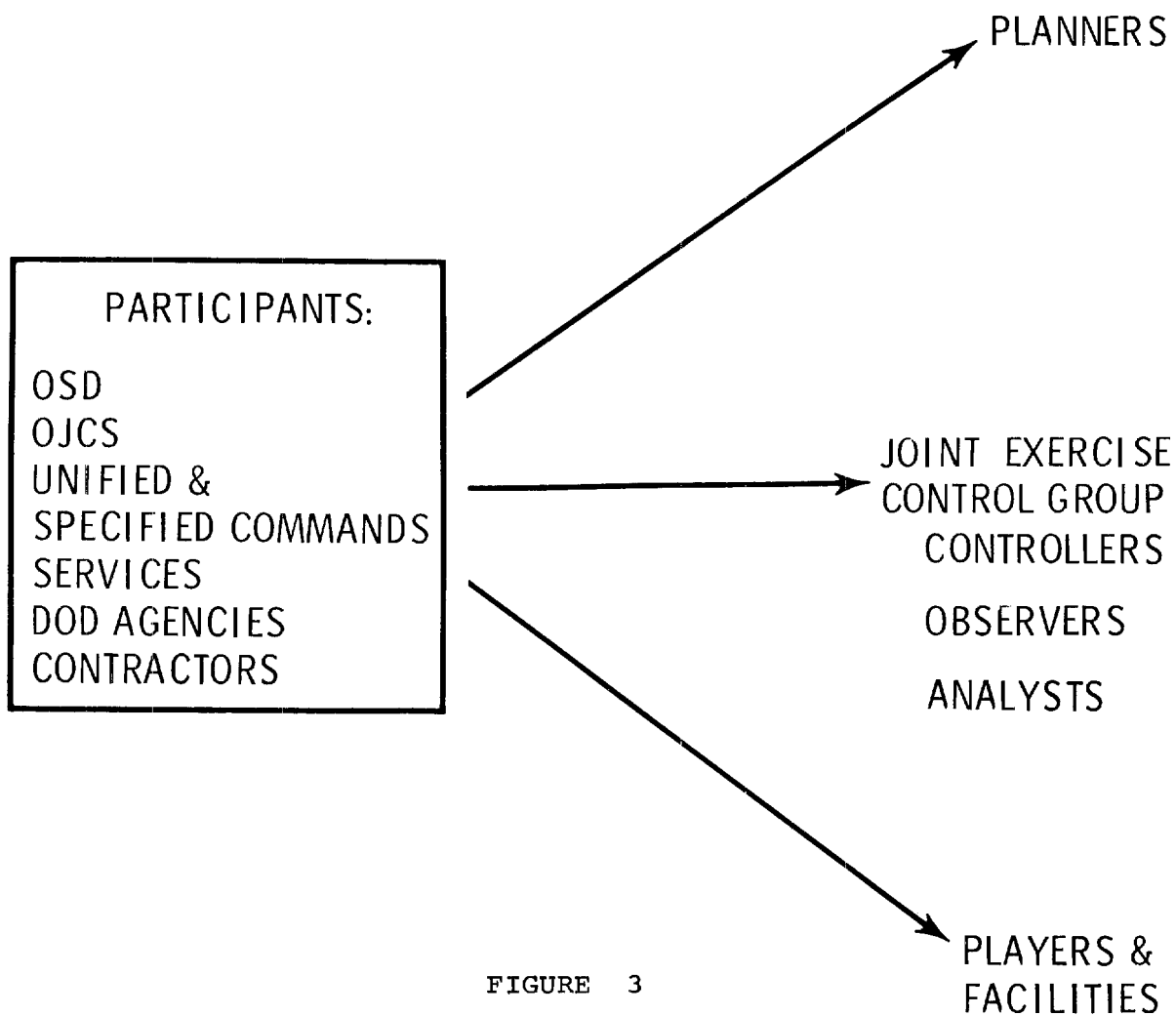
b. The format of the evaluation report (Appendix C) provides an orderly presentation of the objectives of the event, a description of the event, and the resulting conclusions and recommendations with their supporting evidence.

c. An evaluation report, particularly of a large exercise, tends to become a voluminous document. There are a number of different users of the evaluation reports with widely differing interests. While some are interested mainly in overall conduct of the exercise and in the conclusions and recommendations, others are interested in more detailed aspects. It is therefore advantageous to divide the report into separate volumes; this is normally done by publishing the body of the report and annexes in separate volumes.

d. The results of smaller exercises and tests are summarized in the evaluation results reports prepared by the Joint Staff.

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# JCS - SPONSORED COMMAND POST EXERCISES (CPX<sub>s</sub>)



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TABLE 4

DISTRIBUTION OF EXERCISE PLANS

WHITE HOUSE COMM AGENCY	CIA
STATE DEPARTMENT	OP/GSA
OSD	DMA
ARMY	DNA
NAVY	DCA
AIR FORCE	DCPA
MARINE CORPS	DIA
COAST GUARD	DSA
LANTCOM	DOT
NORAD	USID
USEUCOM	NSA/CSS
PACOM	JSTPS
USREDCOM	FAA
USSOUTHCOM	NCS
SAC	USLO SACLANT
	USNMR SHAPE
	DND, CANADA

APPENDIX A

R&D AND OPERATIONS AND MAINTENANCE CONTRACTUAL SUPPORT (U)

1. (U) To further develop WWMCCS exercise capabilities and to improve the efficiency of the evaluation process, R&D and operations and maintenance programs have been developed to support the WWMCCS Evaluation Program. Planned projects through FY 1981 are listed in Table A-1. These projects are in varying stages of development. A detailed description of support projects planned by DCA will be contained in the NMCS Exercise and Evaluation Support Plan for FY 1977-1981. Other support projects will be documented in the appropriate Service or agency programs.
2. (C) Several computer programs which are already running at the National Military Command System Support Center (NMCSSC) are being further developed for the WWMCCS Evaluation Program. These include:
  - a. Exercise Production and Analysis System (EPAS).
  - b. Exercise Message Analysis System.

These automated aids permit the Joint Staff to reduce the manual labor involved in the planning and conduct of exercises and to expedite the evaluation process. Computer models and system simulations are also being used for supplementary analysis and may later be used online to replace WWMCCS organizational elements or subsystems not playing in an exercise. The EPAS is an automated scenario and message generator system which is being developed by the NMCSSC and which will provide a more accurate simulation of certain WWMCCS subsystems and will reduce the time and effort needed to prepare for some of the large exercises.

3. (U) In recent exercises, tactical warning data have been transmitted to the various command centers of the WWMCCS through the missile warning and display systems. However, all that is evaluated in these exercises is some of the communications links and display systems--not the sensor data processing systems. The injection of data at the sensor system sites is currently being

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studied so that the data processing systems and procedures at the data reduction and distribution centers may be tested. Generally, the closer to the sensor that data are injected, the more complex, costly, and realistic the exercise becomes. The feasibility of data injection alternatives on a system-by-system basis will continue to be examined with NORAD and contractor support.

4. (U) Contractor assistance is being obtained through DCA and DNA in the following areas:

- a. Exercise design, data collection/analysis, and exercise evaluation. Deliverables include documentation of the data collection and analysis/evaluation plans and the evaluation final reports.
- b. Development of:
  - (1) Communications simulation methodology and related software.
  - (2) Analytical aids for the evaluation of nuclear weapon effects on command, control, and communications (C3) systems.
  - (3) Improved automated aids for exercise design and analysis and for real time injection of exercise data.

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TABLE A-1  
SUPPORT PROJECTS

Exercise Evaluation Support.  
Development of Exercise Production and Analysis System.  
Study of Feasibility of Injecting Exercise Data at  
Tactical Warning Sensor Sites.  
Analysis of C3 System Response to Nuclear Weapon Effects.  
Study of Alternative Means of Playing Communications  
Degradation.  
Analysis of Information Reporting Requirements.  
Red Response Simulator.  
Development of Automated Exercise Events Design Aids.  
Analysis of WWMCCS Effectiveness and Development of  
Performance Data Base.  
WWMCCS/NMCS Performance Summaries.  
Exercise Message Analysis System.

APPENDIX B

SCHEDULES AND REPORT REQUIREMENTS

1. Schedule

a. The WWMCCS Evaluation Program is published by the Joint Chiefs of Staff on a yearly basis and covers a 5-year period. This program, except for the schedule of evaluation events, will be published by October each year.

b. A schedule of events for evaluation is published by the Joint Chiefs of Staff on a yearly basis and covers a 3-year period. The schedule is published approximately 90 days following publication of the WWMCCS Evaluation Program. It will be coordinated with the annual Worldwide Exercise Scheduling Conference, which is normally held in January. Inputs for evaluation events from the unified and specified commands, Services, and Defense agencies will be requested for the schedule with the distribution of the program.

c. An evaluation report will be published approximately 120 days following the completion of a major exercise which has been scheduled to evaluate the WWMCCS. This report will be prepared by the Joint Chiefs of Staff or an agency designated by the Joint Chiefs of Staff.

d. An evaluation results report will be published on a semi-annual basis by the Joint Chiefs of Staff.

e. A report publication and briefing schedule is provided in Figure B-1.

2. (U) Report Requirements

a. The WWMCCS Evaluation Program provides for a 5-year program of exercising, testing, and evaluating the WWMCCS to include its subsystems and supporting systems.

b. The WWMCCS Evaluation Program encompasses evaluations of selected:

(1) JCS coordinated and directed exercises and tests.

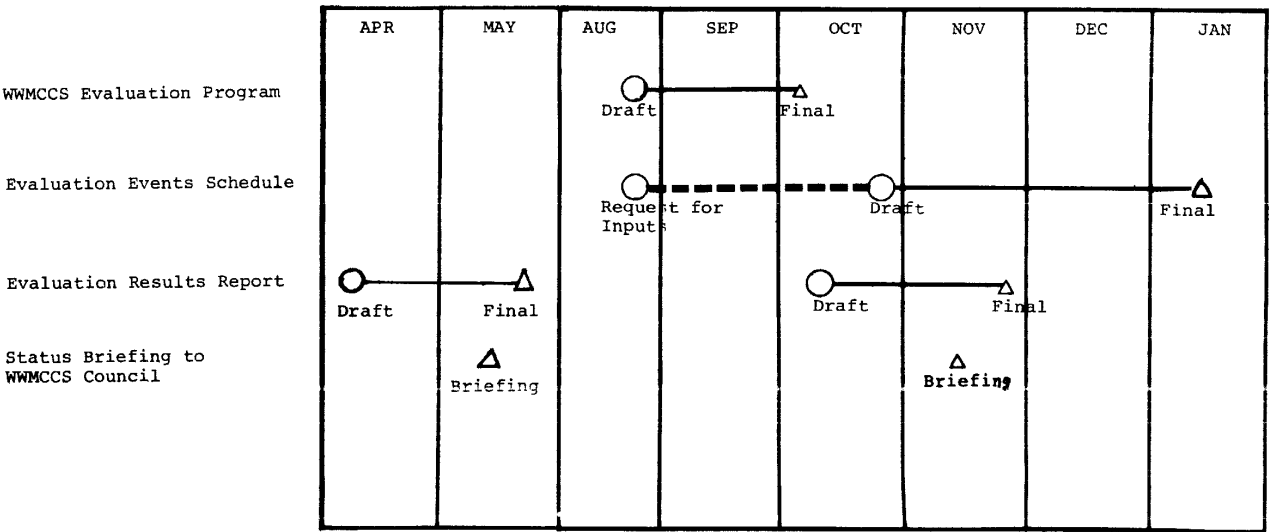
(2) Joint Staff command and control exercises and communications tests.

(3) Unified and specified commands exercises and tests.



FIGURE B-1

REPORT PUBLICATION AND BRIEFING SCHEDULE



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(4) Military Services exercises and tests.

(5) Tests and exercises sponsored by other agencies.

(6) Simulations, evaluation studies, surveys, hardware monitoring, cost benefit analyses, war games, analyses of real-world performance, and analyses of real-world crisis operations.

c. Following publication of the WWMCCS Evaluation Program, the Joint Chiefs of Staff will consolidate and publish a 3-year evaluation schedule. The evaluation schedule will be a single comprehensive schedule which includes all known events to be used to evaluate the WWMCCS.

d. Following the conduct of major JCS coordinated and directed exercises selected for evaluation, an evaluation report will be prepared for distribution to the Secretary of Defense and WWMCCS participants. This report will contain views and findings and must be supported by data obtained from the event.

e. Semiannually, as of 1 October and 1 April, the Chairman, Joint Chiefs of Staff, will submit a report to the Secretary of Defense on the evaluation results and actions underway or recommended to correct the deficiencies uncovered by the evaluations. In addition, these reports should be briefed to the WWMCCS Council.

f. The event reports and evaluation results reports will be the basis for preparing the succeeding year's WWMCCS Evaluation Program. A list of participants and other instructions are provided in Table B-1.

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TABLE B-1 REPORTS

<u>TYPE OF REPORT</u>	<u>WHEN REQUIRED</u>	<u>ORIGINATOR</u>	<u>ADDRESSEE (S)</u>	<u>OTHER INSTRUCTIONS</u>
WWMCCS Annex K Vol I, JCS Pub 19	By October each year	OJCS (J-3 WWMCCS Operations & Eval- uation Division)	Services, Unified & Specified Commands, DCA, DCPA, DIA, DMA, DNA, DSA, NSA/CSS, OSD Staff	
WWMCCS Eval- uation Program Events Schedule	By January each year	OJCS (J-3 WWMCCS Operations & Eval- uation Division)	Services, Unified & Specified Commands, DCA, DCPA, DIA, DMA, DNA, DSA, NSA/CSS, OSD Staff	
Evaluation Report	By 120 days following selected evalua- tion events	OJCS (J-3 Exercise Plans & Analysis Division) or agency designated by OJCS	OJCS, Services, Unified & Specified Commands, DCA, DCPA, DIA, DMA, DNA, DSA, NSA/CSS, OSD Staff	
Evaluation Results Report	As of 1 October and 1 April each year	OJCS (J-3 WWMCCS Operations & Eval- uation Division)	Services, Unified & Specified Commands, DCA, DCPA, DIA, DMA, DNA, DSA, NSA/CSS, OSD Staff	Semiannual briefing to the WWMCCS Council

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## APPENDIX C

### ANALYSIS AND EVALUATION REPORT FORMAT

#### 1. Evaluation Report Format

The format of the evaluation report is as follows:

##### Part I

- a. Cover.
- b. Letter of Promulgation.
- c. Table of Contents.
- d. List of References.
- e. List of Acronyms and Abbreviations.

##### Part II

##### Section 1--Event Description

- A. Identification of event (name, type, form, area, dates).
- B. Responsible agency/command.
- C. Participating elements.
- D. Event objective.
- E. Summary account (description of scenario and conduct).

##### Section 2--Executive Summary

Note: Limited to two pages if possible.

##### Section 3--Analysis Results

- A.
- B.
- ETC.

Note: This section contains a brief paragraph of each subject/item analyzed.

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Section 4--List of Recommendations

A.

B.

ETC.

Note: Annex letters will correspond to those in  
Section 3.

2. WWMCCS Evaluation Results Report. Lessons learned from events conducted to evaluate the WWMCCS are a valuable source of information and reference data for agencies and personnel involved in the direction, management, and operations of the WWMCCS, including its subsystems and supporting systems. Lessons learned can be used as a planning aid to:

- (a) Identify weaknesses (deficiencies).
- (b) Establish priorities for improvements.
- (c) Determine WWMCCS Performance Evaluation Program aims and objectives.
- (d) Eliminate repetitive event efforts.
- (e) Insure the evaluation of the full range of the WWMCCS, including its subsystems and supporting systems.

## APPENDIX D

### EVALUATION OBJECTIVES FOR SCHEDULED EVENTS (U)

1. (U) The evaluation program is prepared annually to identify events which can be used to measure the effectiveness of the WWMCCS in performing the six command and control functional tasks. Specific evaluation objectives are defined for each of these events by analyzing the systems and procedures which support the WWMCCS functions, their applicability to the exercise conditions, and the need for evaluation based on past records and future plans.
2. (U) Steps in the process of selecting candidate evaluation objectives are illustrated in Figure D-1. The WWMCCS elements which support the WWMCCS functional tasks are shown in Figure D-2. Figures D-3 through D-6 summarize the WWMCCS elements which have been evaluated to varying degrees in recent JCS-sponsored command post exercises.
3. (U) Table D-1, then, is a derived list of candidate evaluation objectives for FY 1977 through FY 1979. These objectives are to be considered for inclusion in selected evaluation events conducted by the OJCS and the unified and specified commands.

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PROCESS FOR SELECTING CANDIDATE EVALUATION OBJECTIVES

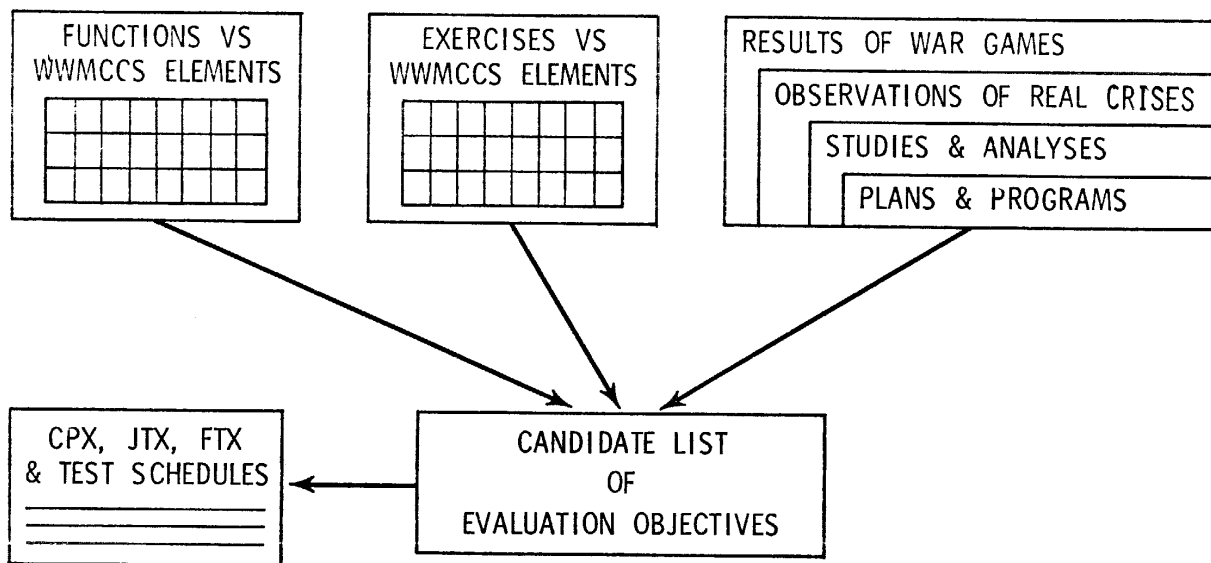


FIGURE D-1

# WWMCCS FUNCTIONS SUPPORTED BY WWMCCS ELEMENTS (U)

EXECUTIVE AIDS	FUNCTIONS		ELEMENTS					
			SITUATION MONITORING	WARNING & THREAT ASSESSMENT	FORCE EMPLOYMENT	DAMAGE ASSESSMENT	RECONSTITUTION & REDIRECTION	TERMINATION
	COMMAND FACILITIES		●	●	●	●	●	●
	WARNING SYSTEMS			●		●		
	COMM SYSTEMS		●	●	●	●	●	●
	ADP SYSTEMS		●	●				
	FILES AND APPLICATION PROGRAMS		●		●	●		
	REPORTING SYSTEMS		●	●	●	●		
EA PROCEDURES			●	●			●	

FIGURE D-2

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FIGURE D-3

WARNING & COMMUNICATIONS SYSTEMS & COMMAND FACILITIES (U)

SYSTEMS & FACILITIES	TACTICAL WARNING SYSTEMS				COMMUNICATIONS SYSTEMS						COMMAND FACILITIES			
	BMEWS	DSP	SLBM		AUTODIN	AUTOVON	AUTOSEVOCOM	EMATS	JCSAN	TACAMO		NMCC	ANMCC	WWABNCP
EXERCISES														
NIGHT TRAIN 73					●	●	●	●	●			●		
NICKEL PLATE 74	●	●	●		●	●	●	●	●	●		●	●	●
POINT BLANK 74					●	●	●	●	●			●		
PRIME RATE 75	●	●	●		●	●	●	●	●	●		●	●	●

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FIGURE D-4

REPORTING PROCEDURES (U)

EXERCISES	REPORTING PROCEDURES																		
	INCIDENT/ EVENT			SITUATION MONITORING			COMM STATUS			MIL INSTAL STATUS			INTEL REPORTS			JOBS		LOGISTICS	
	CAOSOP	FORSTAT	OPREP 3	NUDET	NUREP	OPREPS	SITREP	RECON	COMSPOT	COMSTAT	JADREP	DISUM	INTSUM	SPIREP	DEPREP	CRIMREP	POLCAP	REPOL	CRAFREP
NIGHT TRAIN 73		●	●			●	●					●	●		●				
NICKEL PLATE 74	●		●	●		●	●	●	●			●	●	●					
POINT BLANK 74							●	●	●			●	●	●	●	●			
PRIME RATE 75	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●

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# EMERGENCY ACTION PROCEDURES (U)

EXERCISES	EMERGENCY ACTION PROCEDURES							
	SIOP EXECUTION	SELECTIVE RELEASE	SIOP TERMINATION	ALERT NOTIFICATION	NATO ALERT COORD	SEAGA	UNFORMATTED EAM	EOP
NIGHT TRAIN 73				●			●	●
NICKEL PLATE 74	●	●	●	●	●	●	●	●
POINT BLANK 74				●			●	●
PRIME RATE 75	●	●		●	●	●	●	●

FIGURE D-5

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FIGURE D-6  
AUTOMATIC DATA PROCESSING FILES & APPLICATION PROGRAMS (U)

	FILES											APPLI- CATION PROGRAMS
	BDE-BLUE DAMAGE ESTIMATION	CRP-COORD RECCE PLAN	DEPDA-DEPLOYMENT DATA	FORSTAT-FORCES STATUS	JAD-JOINT RESOURCE ASSESSMENT	NUCAP-NUCLEAR CAPABILITIES	NUCWA-NUCLEAR ACCOUNTING	RRM-RED RESOURCES MONITOR	SIDA-SIOP DATA	JOPS-JOINT OPERATION PLANNING SYSTEM	RECA-RESOURCE CAPABILITY ASSESSMENT SUMMARIES	
NIGHT TRAIN 73												
NICKEL PLATE 74					•			•				
POINT BLANK 74			•									
PRIME RATE 75	•	•	•	•	•	•	•	•	•	•	•	

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TABLE D-1

CANDIDATE WWMCCS EVALUATION OBJECTIVES (U)

(C) Objectives Related to WWMCCS Capabilities Which Support All Six Command and Control Functional Tasks

Evaluate:

1. The responsiveness of WWMCCS support to the NCA and adequacy and timeliness of information required to support the NCA.
2. Adequacy of continuity of operation plans and transitions of commands from primary to alternate locations with and without warning.
3. NEACP and ANMCC capability to perform command and control functional tasks.
4. Logistic support procedures during crisis through general war situations.
5. Effectiveness of the Data Information Coordination Office in supporting NMCS operations.
6. Effectiveness of systems and procedures to report the reaction of the forces of hostile nations.
7. Connectivity of airborne command and control facilities.
8. Adequacy and timeliness of WWMCCS ADP support.
9. Adequacy and utility of the Prototype WWMCCS Intercomputer Network.
10. Adequacy of WWMCCS system security, including network security and ADP security.
11. Adequacy and timeliness of command and control information displays.
12. WWMCCS capability to interface with tactical command and control systems supporting subordinate unified commands and Service component commands.
13. Crisis management communications, including those of the Military Service Command Centers, unified and specified commands, and component commands.

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14. Adequacy of information furnished by environmental support systems.

15. Effectiveness of WWMCCS interface with NATO command, control, information, and ADP systems.

16. Communications and communications security during day-to-day operations, crisis operations, and general war operations, including nuclear and nonnuclear.

17. Nuclear weapon effects on command and control systems.

(U) Objectives Related to WWMCCS Capability to Support the Function of Warning and Threat Assessment

Evaluate:

18. Intelligence support as needed by operations staffs.

19. Adequacy and timeliness of tactical warning and attack assessment.

(C) Objectives Related to WWMCCS Capability to Support the Function of Employing Forces and Executing Operation Plans

Evaluate:

20. Nuclear procedures, including limited nuclear options and regional nuclear options procedures, selective release, conditional release, and SIOP execution.

21. Effectiveness and timeliness of selective release procedures within WWMCCS and NATO.

22. MEECN capability to meet performance required to provide communications for the NCA to deliver emergency action messages, terminate the SIOP, and for conducting continental US defense in a transattack and postattack nuclear environment.

23. Capability to direct employment of forces and execution of operation and contingency plans.

24. Adequacy and timeliness of the development of contingency plans.

25. Mobilization plans and industrial preparedness plans.

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(C) Objectives Related to WWMCCS Capability to Support the Function of Performing Attack, Strike, and Residual Capability Assessment

Evaluate:

26. Adequacy and timeliness of CAOSOP reporting.
27. Adequacy and timeliness of NUREP OCR-EMERG reporting.
28. Effectiveness of systems and procedures to report residual threat assessment.
29. Effectiveness of strike and damage reports and recovery procedures.

(U) Objectives Related to WWMCCS Capability to Support the Function of Reconstituting and Redirecting Forces

Evaluate:

30. Operational control of strategic reconnaissance activities subordinate to the Joint Chiefs of Staff or the commanders of the unified and specified commands.
31. Effectiveness of WWABNCP to support reconstitution and redirection of forces.

(U) Objectives Related to WWMCCS Capability to Support the Function of Terminating Hostilities and Active Operations

Evaluate:

32. Capability of WWMCCS to support the NCA in the exchange of crisis management information and the conduct of negotiations for termination of hostilities on an international basis.

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